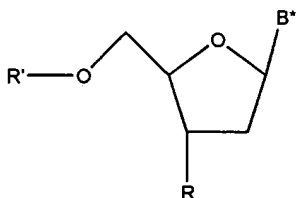


**Amendment to the claims:**

1. (Currently Amended) A cancer-specific radiolabeled conjugate of the formula:



(I)

wherein B\* represents uracil~~thymidine~~ substituted with a radionuclide; R represents H, OH, or O-L-DHT, L being a cleavable bifunctional linking moiety and DHT is 4-dihydrotestosterone which is bound through its hydroxyl substituent to said linking moiety; and R' represents H or a ~~phospho group or a substituted phospho group~~ having the formula - PO(OR<sub>a</sub>)(OR<sub>b</sub>), -PO(OR<sub>a</sub>)(ODHT) or -PO(ODHT)<sub>2</sub>, R<sub>a</sub> and R<sub>b</sub> being the same or different and representing H or lower alkyl having 1-8 carbon atoms and DHT is as previously defined, with the proviso that at least one of the R and R' substituents comprises a DHT moiety.